

IN THE CLAIMS:

Claims 1-88, 92, 94-99, 107-110, 128-130, 133, 141-144, 151-153, 159, 164 and 165 were previously cancelled. Claims 91, 93, 100, 101, 118, 119, 121-123, 131, 132, 134, 135, 145-150, and 154-156 are currently amended. Claims 90, 102, 103, 106, 111-116, 124, 125, 127, 157, 160-163, 166, and 167 are withdrawn-currently amended. Claims 104, 105, and 117 remain withdrawn. Claims 89, 136-140, and 158 are currently cancelled. Claims 120 and 126 are carried forward. New claim 168 is added, all as follows:

Claims 1-89. (Cancelled)

90. (Withdrawn-Currently Amended) The device of claim 89168 wherein each of said primary transport carriages is assigned to a fixed one of said plurality of reel storage spaces in each said separate intermediate reel storage area.

91. (Currently Amended) The device of claim 89168 wherein two of said primary transport carriages can be supported on said at least one secondary transport carriage in each of said first and second web-processing machine.

92. (Cancelled)

93. (Currently Amended) The device of claim 89168 wherein said plurality of reel storage spaces in each of said first and second web-processing machines are arranged parallel to said direction of web travel and before each said web-processing machine.

94-99. Cancelled.

100. (Currently Amended) The device of claim 89168 wherein all of said reels of material are prepared with splices.

101. (Currently Amended) The device of claim 89168 wherein one of said primary transport carriages is positionable in each said reel storage space.

102. (Withdrawn-Currently Amended) The device of claim 101 wherein any ones of said primary transport carriages is reusable in any oneones of said plurality of reel storage spaces.

103. (Withdrawn-Currently Amended) The device of claim 89168 further including a reel of material unpacking station in said reel preparation station and wherein each of said of primary transport carriages can be moved to said unpacking station.

104. (Withdrawn) The device of claim 103 further including a splice preparation station in said reel preparation station and wherein each of said primary transport carriages can be moved to said splice preparation station.

105. (Withdrawn) The device of claim 104 wherein said splice preparation station includes said unpacking station.

106. (Withdrawn-Currently Amended) The device of claim 89168 wherein each said transport route is a virtual extension of each said direction of web travel in each of said first and second web-processing machines.

107-110. (Cancelled)

111. (Withdrawn-Currently Amended) The device of claim 89168 further including a position-sensing system provided along at least a portion of each said transport route and usable for precise positioning of each said at least one secondary transport carriage.

112. (Withdrawn-Currently Amended) The device of claim 89168 further including a secured area positioned around each said immediate reel storage area.

113. (Withdrawn-Currently Amended) The device of claim 112 further including a perimeter fence defining each said secured area.

114. (Withdrawn-Currently Amended) The device of claim 112 further including a reel changer area security system for each said reel changer and forming said secured area.

115. (Withdrawn-Currently Amended) The device of claim 112 wherein each said secured area includes at least one transfer channel.

116. (Withdrawn-Currently Amended) The device of claim 115 further including one of photoelectric beams and ultrasound sensors in said secured area at each said transfer channel.

117. (Withdrawn) The device of claim 116 wherein said one of said photoelectric beams and ultrasound sensors are arranged at different levels.

118. (Currently Amended) The device of claim 88168 further including a plurality of said web-processing stations arranged one in front of the other in said direction of web travel in each of said first and second web-processing machines.

119. (Currently Amended) The device of claim 89168 wherein each said at least one web-processing station in each of said first and second web-processing machines is a printing couple of a rotary printing press.

120. (Previously Presented) The device of claim 119 wherein said printing couple defines a horizontal web path.

121. (Currently Amended) The device of claim 89168 wherein each said separate intermediate reel storage area in each of said first and second web-processing machines is a FIFO storage area.

122. (Currently Amended) The device of claim 89168 further including a web-processing machine control center adjacent each said separate intermediate reel storage area.

123. (Currently Amended) The device of claim 89168 further including wheels on each of said plurality of primary transport carriages.

124. (Withdrawn-Currently Amended) The device of claim 89168 further including wheels on each said secondary transport carriage and rails defining said single, straight transport route in each of said first and second web-processing machines and adapted to receive said wheels.

125. (Withdrawn-Currently Amended) The device of claim 124 further including primary transport carriage receiving rails on each said secondary transport carriage.

126. (Previously Presented) The device of claim 123 further including a primary transport carriage chain drive.

127. (Withdrawn-Currently Amended) The device of claim 125 wherein said primary transport carriage receiving rails on each said secondary transport carriage are spaced at a distance from each other.

128-130. (Cancelled)

131. (Currently Amended) The device of claim 89168 wherein each of said plurality of reel storage spaces in each of said separate intermediate reel storage areas accommodates at least a single one of said primary transport carriages.

132. (Currently Amended) The device of claim 89168 wherein others of said plurality of reel storage spaces in each of said separate intermediate reel storage areas accommodate at least two of said primary transport carriages.

133. (Cancelled)

134. (Currently Amended) The device of claim 131 wherein all of said plurality of reel storage spaces in each of said separate intermediate reel storage areas accommodate at least two of said primary transport carriages.

135. (Currently Amended) The device of claim 89168 wherein each of said primary transport carriages is adapted to accommodate a partial reel of material.

136-144. (Cancelled)

145. (Currently Amended) The device of claim 89168 wherein spacings of all of said reel storage spaces are greater than said reel diameter.

146. (Currently Amended) The device of claim 89168 wherein all of said reel storage spaces in each of said separate intermediate reel storage areas are each sized to store two of said prepared reels of material.

147. (Currently Amended) The device of claim 89168 wherein at least three of said reel storage spaces in each of said separate intermediate reel storage areas are arranged, in each of said first and second groups of reel storage spaces, on both of said first and second sides of said single, straight transport route in each of said first and second web-processing machines.

148. (Currently Amended) The device of claim 89168 wherein at least two adjacent ones of said reel storage spaces in each of said separate intermediate reel storage areas are adapted to store new ones of said prepared reels of material.

149. (Currently Amended) The device of claim 148 wherein at least said a majority of said reel storage spaces in each of said separate intermediate reel storage areas are adapted to store said new ones of said prepared reels of material.

150. (Currently Amended) The device of claim 149 wherein all of said reel storage spaces in each of said separate intermediate reel storage areas are adapted to store said new ones of said prepared reels of material.

151-153. (Cancelled)

154. (Currently Amended) The device of claim 119 wherein said at least one printing couple, said reel changer and said intermediate reel storage area in each of said first and second laterally spaced web-processing machines are in a common plane.

155. (Currently Amended) The device of claim 154 including a plurality of printing couples in each said first and second laterally spaced web-processing machine and all on said common plane.

156. (Currently Amended) The device of claim 89168 wherein each said first and second laterally spaced web processing machine has a single reel changer.

157. (Withdrawn-Currently Amended) The device of claim 89168 further including a web dryer having a web dryer longitudinal axis and being in each said first and second laterally spaced web-processing machine, and further including a wherein said secondary support carriage single, straight transport route in each of said first and second laterally spaced web-processing machine is aligned with said web dryer longitudinal axis.

158-159. (Cancelled)

160. (Withdrawn-Currently Amended) The device of claim 89168 further including an under floor primary transport carriage conveyance system in each of said majority of said reel storage spaces and forming said primary transport carriage drive means.

161. (Withdrawn-Currently Amended) The device of claim 160 wherein each said under floor transport carriage conveyance system has a continuous and revolving means of propulsion.

162. (Withdrawn-Currently Amended) The device of claim 161 wherein said continuous mederevolving means of propulsion is a chain.

163. (Withdrawn-Currently Amended) The device of claim 89168 further including a drive for each of said plurality of primary transport carriages.

164-165. (Cancelled)

166. (Withdrawn-Currently Amended) The device of claim 89168 wherein said at least one secondary transport carriage in each said first and second laterally spaced web-processing machine has a separate drive.

167. (Withdrawn-Currently Amended) The device of claim 166 wherein said at least one secondary transport carriage separate drive in each said first and second laterally spaced web-processing machine is independent of said primary transport carriage drive means.

168. (New) A device for transporting reels of material comprising:
a reel receiver adapted to receive and to store full reels of material;
a reel preparation station adapted to receive ones of said full reels of material from said reel receiver and to prepare said full reels of material to form prepared reels of material;

first and second laterally spaced web-processing machines, each including at least one web-processing station and a reel changer having an uploading and unloading position, said at least one web-processing station and said reel changer in each of said first and second laterally spaced web-processing machines being arranged sequentially in a longitudinal direction of web travel through the respective ones of said web-processing machines, said reel preparation station being a shared reel preparation station positioned between said first and second web processing machines and being usable to provide said prepared reels of material selectively to both of said first and second laterally spaced web-processing machines from said reel receiver;

a separate intermediate reel storage area for each one of said first and second laterally spaced web-processing machines with each said intermediate web storage area being adapted to receive and to store a plurality of said prepared reels of material received from said shared reel preparation station, each of said prepared reels of material having a reel width in an axial direction of each said reel of material and a reel diameter;

a plurality of primary transport carriages, each said primary transport carriage being adapted to support one of said full reels of material in said shared reel preparation station and during movement of each one of said prepared full reels of material directly from said shared reel preparation station to a selected one of said separate intermediate reel storage areas and also in said selected intermediate reel storage area associated with each one of said first and second laterally spaced web-processing machines;

a single, straight transport route extending directly from said intermediate reel storage area for each one of said first and second laterally spaced web-processing machines to each said reel changer in each said respective web-processing machine, each said single, straight transport route being aligned with said longitudinal direction of web travel through said associated one of said laterally spaced first and second web-processing machines;

at least one secondary transport carriage supported for movement along each said single, straight transport route for each of said first and second web-processing machines, said at least one secondary transport carriage for each said single, straight transport route being adapted to receive one of said primary transport carriages and its supported one of said prepared reels of material, directly from said shared reel preparation station and to transport each said primary transport carriage and its supported one of said prepared reels of material directly to said separate one of said intermediate reel storage areas for each of said first and second web-processing machines, from said shared reel preparation station and along said single, straight transport route of each of said first and second web-processing machines and further being adapted to transport each said primary transport carriage, and its supported one of said prepared reels of material, directly between said intermediate reel storage area, along said single, straight transport route to said uploading and unloading position of said reel changer for each of said first and second web-processing machines;

a plurality of reel storage spaces in each said intermediate reel storage area for each of said first and second laterally spaced web-processing machines, each of said

plurality of reel storage spaces for each of said first and second laterally spaced web-processing machines including a first group of reel storage spaces located on a first side of said single, straight transport route for each of said first and second web-processing machines and a second group of said plurality of reel storage spaces located on a second, opposite side of said single, straight transport route, at least two of said reel storage spaces in each of said first and second groups of said reel storage spaces for each of said intermediate storage areas being aligned directly one in front of the other in said longitudinal direction of each said web processing machine, said at least two longitudinally aligned ones of said plurality of reel storage spaces in each of said first and second groups of reel storage spaces in each of said intermediate storage areas each having a storage space width, in a direction transverse to said longitudinal direction of web travel, to each store at least one of said prepared reels of material transported directly to each said reel storage space from said reel preparation station and to be transported directly from each said reel storage space to said reel changer of a respective one of said first and second web-processing machines by one of said primary transport carts loaded onto said secondary transport carriage for each said web processing machine;

a separate branch transport line extending perpendicular from said single, straight transport route for each of said first and second laterally spaced web-processing machines and into each of said plurality of reel storage spaces in each of said first and second groups of each of said intermediate reel storage areas, a spacing between adjacent ones of said branch transport lines in said aligned reel storage

spaces in each of said first and second groups in each of said intermediate reel storage areas being greater than said reel diameter, at least two of said adjacent ones of said reel storage spaces in each of said first and second groups in each said intermediate reel storage area being adapted to each store said at least one of said prepared reels of material received from said reel preparation station and each supported on a separate one of said primary transport carriages; and

a primary transport carriage drive means in at least a majority of said at least two of said reel storage spaces in each of said first and second groups of said reel storage spaces in each of said intermediate reel storage areas.